the figures of the head he gives (one of which is here reproduced), are likewise of very great interest to naturalists, for they seem to indicate that the Ceylonese animal is a distinct local race of *Bos bubalis*. After stating that the horns are smaller and less regular in form than those of the buffalo of the Indian mainland, Mr. Storey observes that

"In India they seem almost all to curve boldly outward and upwards, finally curving in towards each other at the points. In Ceylon they are very irregular, and usually much shorter, though occasionally they may be more massive than Indian horns. The commonest form are those curving outwards and upwards [in] crescent form, but not with the bold, almost half-circular, sweep of the Indian heads."

In this place it may be mentioned that as the author is not a photographer, he has been compelled to borrow the admirable photographs of scenery and animals with which the volume is illustrated from friends and brother-sportsmen. To one of these we have already alluded; a second, showing the most beautiful of all Ceylonese animals, is reproduced as an example of the general excellence of the pictures.

Like all the big-game animals of the island, the chital is specifically the same as its Indian representative. The very fact that tigers are unknown in the island is, however, itself practically sufficient to indicate that all these animals are racially distinct from the mainland forms.

Although big-game animals naturally form the main theme, the author has something to say regarding smaller game, and likewise gives much information with regard to the physical characters and scenery of the country; while the requirements of novices contemplating a sporting trip are not forgotten. Although confessedly written from the point of view of the sportsman rather than naturalist, Mr. Storey's volume contains much which appeals to both classes, while it may likewise be commended as a delightful description of a tropical country to the general reader.

THE DEATH OF M. M. BERTHELOT.

THE tragic death of M. Marcellin Berthelot on Monday has awakened a feeling of sympathetic sorrow throughout the intellectual world. As a chemist, philosopher, a fearless exponent of scientific truth, and permanent secretary of the Paris Academy of Sciences, M. Berthelot's work and influence made him renowned among the greatest men of our time. The French nation has to mourn the loss of one of its leading citizens, and its sorrow is shared wherever knowledge and research are cherished.

Several conflicting accounts of the dramatic circumstances of M. Berthelot's death appeared in Tuesday's papers. One report states that he expired clasping the hand of his wife, who had been ill for a year and had crossed the dark river a few minutes before. According to another account, M. Berthelot was sitting in his study when the news of his wife's death was brought to him by a nurse, and he fell back in his chair dead. The *Times* correspondent states that when M. Berthelot entered his wife's room on Monday he found her dead, and the shock was so great that he returned to his study and there died suddenly himself.

France knows how to honour its illustrious men, so it is not surprising to learn that at the opening of Tuesday's sitting the French Government proposed to grant a credit of 800*l*. for a national funeral for M. Berthelot, and to adjourn the sitting as a sign of mourning. A similar expression of sympathy took place in the Senate, and the Academy of Medicine likewise adjourned its sitting. We learn from the *Times* that there will be no religious service in honour of the dead. The national civil funeral has been accepted by the family on the understanding that Mme. Berthelot should not be separated from her husband, who could not live after her.

We propose to give an account of M. Berthelot's life and work in another issue, and here limit ourselves to the expression of deep regret at his sad death, and of satisfaction that the French nation has so clearly shown its high regard for the great man it has just lost.

NOTES.

THE Goldsmiths' Company has made a donation of 10,000*l*. to the Lawes Agricultural Trust (Rothamsted Experimental Station) to be devoted to research in connection with the soil, and to be known as the Goldsmiths' Company's fund for soil investigation.

MR. A. LAURENCE ROTCH, the founder and director of Blue Hill Meteorological Observatory, has been appointed professor of meteorology in Harvard University. The Blue Hill observations and investigations have been published for many years in the Annals of the Harvard College Observatory.

AT the annual general meeting of the Chemical Society on Friday, March 22, the president, Prof. R. Meldola, F.R.S., will deliver an address entitled "The Position and Prospects of Chemical Research in Great Britain."

MR. W. H. POWER, C.B., F.R.S., medical inspector of the Local Government Board, has been appointed chairman of the Royal Commission on Tuberculosis, in succession to the late Sir Michael Foster.

THE *Times* correspondent at Ottawa reports that on Tuesday a deputation of representative Canadians asked for a Federal grant towards the erection of a national memorial at Brantford, Ontario, in honour of Dr. Alexander Graham Bell, who invented the telephone in that city. In reply, Sir Wilfrid Laurier expressed himself in hearty sympathy with the movement.

A MINISTERIAL measure having for its object the amendment of the Patent Law was introduced in the House of Commons on Tuesday. The main purpose of the Bill is to prevent the patent laws from being used for the hindrance and suppression of British industrial development. It is proposed to simplify the procedure of compulsory licence, and instead of the applicant having to go before the Judicial Committee of the Privy Council, as at present, he will go, first of all, before the Controller and afterwards before a judge specially selected by the Lord Chancellor, who will be habitually dealing with patent cases. This method will tend very considerably to shorten the hearing of cases, because they will be dealt with by an expert judge. The Bill also provides that any applicant can go to the Controller three years after the granting of any patent and apply for the revocation of the patent on the ground that it has not been adequately worked within the United Kingdom. In addition to compulsory working, syndicates are to be enforced to deposit samples when the Patent Office requires them to do so, or else their application will be refused.

THE Geologists' Association has arranged an excursion to Plymouth from Thursday, March 28, to Tuesday,

April 2, so that members who can spend Easter in the west will be able to study the rocks and deposits of the Plymouth and Cornish areas under very pleasant conditions. The excursion secretary is Mr. G. E. Dibley, 7 Champion Crescent, Lower Sydenham, S.E.

EARL CARRINGTON, President of the Board of Agriculture, has accepted the invitation to open the second National Poultry Conference at Reading on Monday evening, July 8. The Mayor of Reading (Mr. E. Jackson) has intimated his intention to give a reception to delegates and members in the Town Hall, Reading, on that evening, when the official opening of the conference will take place.

A PRELIMINARY announcement has been issued regarding the arrangements for the fourth International Mathematical Congress, which is to be held in Rome on April 6–11, 1908. A large general committee has been formed representing the Reale Accademia dei Lincei and the Circolo matematico di Palermo. A special feature will be the organisation of lectures, or, to use the American term, colloquia, each embracing the survey of an extended region of mathematical science, and the following mathematicians have promised to lecture:—Profs. G. Darboux, A. R. Forsyth, D. Hilbert, F. Klein, H. A. Lorentz, G. Mittag Leffler, S. Newcomb, E. Picard, H. Poincaré. The subscription is 25 francs for members, 15 francs for ladies' tickets. The treasurer is Prof. Vincenzo Reina, 5 Piazza S. Pietro in Vincoli, Rome, while Prof. G. Castelnuovo, at the same address, is general secretary of the organising committee.

THE sixtieth annual meeting of the Palæontographical Society was held at the apartments of the Geological Society, Burlington House, on March 15. The report of the council referred to the activity of students of palæontology in Great Britain at the present time, as witnessed by the number and variety of the memoirs offered for publication. Among instalments of monographs issued in 1906, one completed Mr. Reed's description of the Girvan Trilobites and another began a new monograph of Cambrian Trilobites by Mr. Lake. The Carnegie trust for the universities of Scotland had defrayed the cost of five plates of Old Red Sandstone fishes described by Dr. Traquair. The society lost several subscribers by death in 1906, among these the Rev. J. F. Blake, who left his monograph of Cornbrash fossils unfinished. The funds had been augmented by a special sale of back stock to members, but many new subscribers were needed to raise the normal income to the amount received by the society ten years ago. Dr. Henry Woodward, F.R.S., Dr. G. J. Hinde, F.R.S., and Dr. A. Smith Woodward, F.R.S., were re-elected president, treasurer, and secretary respectively. Messrs. J. Hopkinson, W. D. Lang, H. Woods, and G. W. Young were elected new members of council.

THE Pharmaceutical Society of Great Britain has on several occasions benefited by the generosity of Sir Thomas Hanbury, whose death was announced in last week's NATURE. To the museum of the society he presented the valuable collection of rare ancient and modern materia medica made during many years by his brother Daniel, as well as the whole of the medicinal plants of his rich herbarium. These now occupy a special room of the museum, named the Hanbury Room. To the library of the society he presented a fine collection of scarce and valuable works on materia medica and botany, many of which are now extremely difficult to obtain. At the re-opening of the School of Pharmacy in 1903, at which he was present, Sir Thomas expressed the wish that his name should, in future, be associated with the Daniel Hanbury gold medal, which is offered biennially by the Pharmaceutical Society for original research in the natural history and chemistry of drugs, and he handed to the society securities, so that each recipient of the gold medal should at the same time be presented with the sum of fifty pounds. His generosity extended even to the School of Pharmacy, the silver medallists of each session receiving copies of "Pharmacographia" and "Science Papers," in which volumes the life-work of the late Daniel Hanbury are embodied. It is interesting to note that the munificence of Sir Thomas always had a practical aspect. His gifts were intended to help and stimulate personal effort, and were always given with discrimination after due consideration.

A SCIENTIFIC expedition under the auspices of the Royal Geographical Society, the funds for which had been found by the Alpine Club, had been arranged to explore Mount Everest from the Tibetan side. It was proposed that the party, under the command of Major the Hon. Charles Bruce, M.V.O., of the 5th Gurkha Rifles, should travel from Darjeeling north to Kampadzong, just on the Tibetan side of the Indian frontier. There it would have turned sharply and nearly due west to Kharta, from near which point the ascent was to have been commenced. Nepaul territory would nowhere have been violated. It was proposed, moreover, that the natives should have been dealt with directly by the English leaders, and that every precaution should be taken to avoid any cause of friction. The Home Government, however, refused the necessary permission. Mr. Morley, replying to a letter from Sir George Goldie, K.C.M.G., president of the Royal Geographical Society, said it was not possible, consistently with the interests of the policy of the Government, for the Government of India to give encouragement or help to exploration in Tibet. Mr. Morley later in his letter made the unfortunate assumption that it was proposed to proceed "furtively" through Tibetan territory, a suggestion which Sir George Goldie repudiates very emphatically. It is conceivable that high Imperial policy should lead the Government to decide that the expedition was inexpedient, but it is difficult indeed to realise that Mr. Morley should have supposed that a body of distinguished geographers could countenance for an instant any scheme of a "furtive" character.

THE annual dinner of the Institution of Civil Engineers was held on March 13, when the president, Sir Alexander Kennedy, F.R.S., was in the chair. Lord Kelvin responded to the toast "Science and Literature," and is reported by the *Times* to have said it is interesting to remember that science has touched some of the noblest departments of art, for Leonardo da Vinci was one of the greatest engineers as well as one of the greatest artists of all times. Lord Kelvin also referred to the great achievements of Smeaton, the engineer of the Eddystone Lighthouse, and remarked that scientific engineering has grown up since the middle of the nineteenth century. About 1838 or 1839 the first professor of engineering in the British Empire was appointed, his chair being one established in the University of Glasgow. The demand of engineers for improved training in science has never flagged since then, and all our universities now have engineering schools. Lord Tweedmouth, in responding to the toast of "The Guests," remarked that the engineering profession

is very close indeed to the heart of the Admiralty. He referred to the services of Sir Alexander Kennedy in connection with naval construction, to the advice concerning dockyards given by Sir William Matthews, and to the distinguished work as a designer of ships of Sir William White. It is comparatively recently, he said, that the Admiralty has been so closely brought in touch with the civil engineer. But all the great works ordered by the Admiralty have been carried out by the advice of engineers.

AN unsettled type of weather prevailed over the whole of the British Islands during the past week, and the wind frequently attained the force of a gale on our coasts. A storm of more than ordinary severity was experienced in the north-west of England during the late hours of Saturday and the early hours of Sunday (March 16–17). In places on our north-west coast the wind attained the pressure of about 18 lb. on the square foot. The storm reached its greatest violence from about 9 p.m. to midnight, and afterwards the gale rapidly subsided. Unfortunately, the strongest wind force was coincident with the occurrence of high water, and in consequence much damage was occasioned by wind and wave. Notwithstanding the windy character of the weather, thick fog has prevailed on our south-west coasts, resulting in the grounding of at least two large steamships—one going ashore late on Sunday night and the other in the early morning on Monday.

THE report of the Maidstone Museum, Public Library, and Art Gallery, for 1906, chronicles a very successful year, notably for the fact that presentations have been made by donors living at considerable distances from the borough. Misprints like Malay Peninsular and Osteolepus somewhat detract from the style of the report.

THE blue jay (*Cyanocitta cristata*), the killdeer plover (*Ægialitis vocifera*), and the bluebird (*Sialia sialis*), form the subject of the last three of the excellent series of illustrated leaflets issued by the (U.S.) National Association of Audubon Societies.

NEW or little-known perch-like fishes in the collection of the academy, and the land-shells of the Ozark Mountains of Arkansas and Missouri, form the subjects of papers in the issue of the Proceedings of the Academy of Natural Sciences of Philadelphia for December last.

AT the conclusion of an exhaustive memoir on the development of the common ring-snake (or grass-snake), published in vol. lxxxvi., part i., of the *Zeitschrift für wissenschaftliche Zoologie*, the author, Mr. Theodor Viefhaus, institutes a careful comparison to show in what respects the early stages of a number of other reptiles differ from those of the species described. The preamnion and the primitive groove are among the structures in which such differences are in many cases very notable.

THE report of the Royal Scottish Museum, Edinburgh, for 1906, contains a well-merited tribute to the services of Dr. R. H. Traquair, who retired in August last after a thirty-two-years' tenure of the post of keeper of the natural history department. Among the gifts received during the year, mention may be made of a giraffe from the Quasaengeshu plateau, British East Africa, presented by Lord Hindlip. This should be of the same race as the large mounted pair exhibited in the Natural History Museum.

To the *Naturalist* for March, Mr. Arthur Whitaker contributes further notes on the breeding habits of British bats, and more especially the ordinary bat, or pipistrelle. July, it appears, is the great month for breeding among British bats, and it has been demonstrated that in the pipistrelle the period of gestation is not less than forty-one days, and is probably of about six weeks' duration. At birth the young pipistrelle is flesh-coloured, totally blind, and naked except for a few hairs on the muzzle. Fur begins to show in about a week, and soon after imparts a golden tinge to the back and a more silvery tint to the under-parts. Even when only a few days old the young bats might be seen hanging altogether apart from their parents, but up to the thirty-first day (when the last died) they did not attempt flight on their own account.

INSECTS associated with or related to the Mexican cotton-boll weevil continue to engage the attention of the U.S. Bureau of Entomology, parts iii., iv., v., and vii. of Bulletin No. 63 being devoted to them. The most important of these is the Texan ant, *Solenopsis geminata xylone*, which attacks the boll-weevil in sufficient force to effect an appreciable diminution in its numbers. An examination made last autumn of 300 fallen squares and bolls of cotton collected indiscriminately showed that 40 per cent. of the weevils (in all stages) by which they were infested had been killed by the ants. The ant, which is widely distributed in Texas and western Louisiana, and may be found on totally different types of soil, is undoubtedly of considerable benefit as an established enemy of the weevil throughout nearly all the area at present infested by the latter.

A SUGGESTION for obtaining colour-correct photographs of flowers and natural objects without the use of colour screens is made by Mr. J. H. Crabtree in the current number of the *Photographic Monthly*. The method consists in using flashlight powders containing lithium and strontium compounds. It should be instructive to compare results obtained by photographing parrot-tulips in this way with photographs taken with a carefully selected colour screen.

IT is at first somewhat surprising to note the great variety of fruits recommended for cultivation in Ceylon in a Circular (vol. iii., No. 14) issued from the Royal Botanic Gardens, as the lists include such European fruits as the pear, cherry, and blackberry, as well as tropical and sub-tropical productions. This is possible owing to the variations in climate at different elevations, and the author, Mr. H. F. Macmillan, arranges his lists according to a vertical scale. A second year's experimental trial of cotton cultivation at Maha-iluppalama forms the subject of another Circular (No. 18).

IN the Kew Bulletin (No. 2) is published the nineteenth series of "Diagnoses Africanæ," containing new species of Hibiscus, Adenium, Strophanthus, and a new Landolphia from Delagoa Bay; also the twelfth series of "Decades Kewenses," including an Aconite from Sikkim and two species of Vitex from Borneo. A collection of marine algæ from the Chatham Islands, from which two new species were obtained, is described by Mr. A. D. Cotton, and Mr. J. M. Hillier contributes some notes on economic products imported into Liverpool. The possibility of growing *Catalpa cordifolia*, allied to the ornamental *Catalpa bignonioides*, for timber in this country is answered in the negative by Mr. W. J. Bean.

THERE is a chance of unintentional misrepresentation or exaggeration when reports of scientific discoveries are presented by non-scientific writers, a notable instance having recently occurred in certain accounts of plant experiments made by Mr. L. Burbank. In these circumstances, an authentic account by a competent critic was desirable, and such is found in the article contributed by Prof. Hugo de Vries in the *Century Magazine* for this month. While it has happened that owing to the neglect of European records, horticultural productions have been incorrectly described as new in America, there is no doubt as to the novelty of many interesting sports collected and developed by Mr. Burbank; the Bartlett plum, thornless brambles, and the scarlet Californian poppy attracted Prof. de Vries's notice as he was on the look-out for possible mutations. But in so far as statements have been made that the practical results are opposed to scientific theories, such as the laws of Mendel, Prof. de Vries concludes that Mr. Burbank has not studied these theories, being chiefly concerned with the practical value of his varieties.

MR. W. E. COLLINGE, head of the department of economic zoology of the University of Birmingham, sends us particulars of a new gooseberry pest identified by him as a result of recent work upon the genus of mites known as Eriophyes, of which *E. ribis* (Nalepa), causing "big bud" on black currants, is perhaps the most familiar example. Mr. Collinge has long held the opinion that many other fruit trees would ultimately be found to possess these mites. During the past week he has found a mite of the genus Eriophyes in a number of gooseberry cuttings received from Evesham. The species, which appears to be a new one, is rather longer than *E. ribis*, and a full description of it will be published. It is proposed to name the mite *Eriophyes grossulariae*. The purpose of the present communication is to direct the attention of all gooseberry growers to the new wood of their trees, upon which the buds appear to be dead or drying up. Such should be cut off and immediately destroyed by burning.

THE Phillips Academy, Andover, Mass., which claims to be "the only preparatory school in the world that possesses a fine museum and department of archæology," has issued two Bulletins prepared by Mr. W. R. Moorfield, the curator of the Peabody Museum in connection with that institution. The greater part of the first is devoted to an account of the exploration of the Chaco group of Pueblos in New Mexico, from which many specimens of a familiar type were disinterred. More novel and interesting is the description of Flint Ridge, which in the opinion of the author "furnished more material for aboriginal usages than did any given area in the United States. Arrows and knives made of its multicolored chalcedony and chert are found in western New York and far down the Mississippi." The second Bulletin is a study of the "so-called gorgets," a class of perforated articles made of slate, so named because they are generally supposed to be neck ornaments. Various uses have been suggested for these curious objects—that they were ornaments or decorations without religious significance; that they were used as beads, buckles, or buttons; as weights or spindle-whorls; for games; or, finally, as amulets. The authors, after a review of these various suggestions, conclude that they were used as neck ornaments with some religious significance, as "bracers," or wrist-protectors in using the bow, and for twine-twisting or netting: but the subject is far from being exhausted, and their origin and use are still obscure. On the whole, these pamphlets are a welcome indication of the importance of anthropological studies in the United States.

THE Transactions of the Institution of Engineers and Shipbuilders in Scotland (vol. l., part iv.) contains a paper by Mr. J. G. Johnstone on the stability of submarines. Accidents have happened to several navigable submarine vessels, and as these vessels were of the type known as the diving submarine, there has been much discussion regarding the stability of vessels of that special type. The author gives results of investigations into the static stability and the stability of motion of a special case. As the speed of future types is to be made greater, the more important becomes the necessity for such investigations, and it is urged by the author that tank experiments would be of special value.

THE coal-dust problem is discussed by Mr. James Ashworth in *Engineering* of March 15. Dust of any sort is a source of danger in every mine that produces firedamp. The records of various explosions show that the only certain arrestment of a coal-dust explosion occurs when there is an excess of dust, which smothers the flame through lack of air to maintain combustion, and that the most favourable atmosphere to encourage the spread of an explosion is that which contains a maximum percentage of water vapour and a normal quantity of floating coal-dust. Protection against disaster is therefore limited to safe lighting and safe blasting. The watering of dusty roads, which is compulsory in Westphalia, is no deterrent to wholesale devastation.

IN the Journal of the Franklin Institute (vol. clxiii., No. 2) there is an exhaustive article by Mr. E. S. Sperry on the manufacture of rolled sterling-silver. Within the past twenty-five years this manufacture has undergone a remarkable change. Instead of being confined to the wealthy, sterling-silver is now found in very general use, the reason being, not the reduction in the price of silver, but in the cost of manufacture due to the use of rolled sheet-metal. Articles which formerly were made from rods are now made by stamping from sheet-metal, with the employment of modern machinery in place of hand labour. The various operations employed in the production of the sheet-metal which is the foundation of the manufacture of modern sterling-silver ware are described and illustrated by Mr. Sperry.

THE *Geographical Journal* for March contains a valuable discussion of the existing observations of the heights of the central African lakes and mountains, by Captain T. T. Behrens, R.E. The surfaces of the three principal African lakes having been connected with each other and with the Indian Ocean by a complete set of trigonometrical operations, Captain Behrens compares the results with earlier determinations by hypsometer and barometer, and he also deals with the heights of the principal peaks, which have been connected trigonometrically with more or less accuracy. A list of heights, based on mean sea-level at Mombasa, and carried to Lake Victoria by Uganda railway levels, is compared with means from travellers' observations, and also with values obtained by Dr. Kohlschütter, who employs a modification of the usual formulæ which allows for the influence of local climatic factors. The results seem to indicate that the barometric and hypsometric observations give closer approximations to the truth than is generally supposed.

IN NATURE of February 8, 1906 (vol. lxxiii., p. 352), a brief account was given of the proceedings of the meeting of the International Meteorological Committee in Innsbruck in September, 1905. The k.k. Zentralanstalt für Meteorologie und Geodynamik has now published a volume of 154 pages (Vienna: W. Braumüller, 1906) which contains a full report of these proceedings and much other valuable information. Thus, in addition to the reports of several special committees which dealt with cloud classification, earth magnetism, and atmospheric electricity, a valuable series of appendices is given consisting of communications to the commission relating to many different subjects of interest and importance which were considered. The text of this volume is in the German language, but a resolution of the commission was passed at the fourth meeting to the effect that both English and French editions should be subsequently published.

SINCE the discovery and practical application in Germany of processes for producing "synthetical" indigo, the planters of India have made strenuous efforts to improve their methods of dealing with the natural material. In this connection, the report for the year 1906–7 of the work of the Indigo Research Station, Sirsiah, of the Bihar Planters' Association, which has just been issued, presents interesting reading. The report, written by Mr. Cyril Bergtheil, is divided into three sections, namely, laboratory work, manufacture, and agriculture. Perhaps the principal point that merits notice is that relating to the discrepancies between the results obtained by a number of different analysts who were entrusted with the examination of the same samples of indigo. The same material was analysed at Calcutta, Bradford, Manchester, and Berlin, and results were returned by the different analysts varying from 71 per cent. to 96 per cent. of indigotin. The question of the analysis of indigo has recently been the subject of several papers, but it is by no means yet decided which is the best and most trustworthy method for the purpose, although Mr. Bergtheil confidently recommends the processes he has adopted. The question of analysis is one of great importance, and it is clear that no real progress in indigo research can be made until it is satisfactorily settled. What appears to be a decided improvement in indigo culture is described in the report with reference to the germination of the seed of the Java plant. It would appear that this seed does not usually germinate satisfactorily owing to its possessing a "cuticle" which is impermeable to water. To remedy this, it has been found advantageous to soak the seeds for half an hour in concentrated sulphuric acid, and subsequently to wash with water very thoroughly before sowing. Good seed treated in this way has been found to germinate to the extent of 100 per cent. The report also deals in detail with the work done on the farms established recently to supply seeds of the Java indigo plant.

UNDER the title "A Junior Course of Comparative Geography" Messrs. G. Philip and Son, Ltd., have just issued Course A of the "Progressive Course of Comparative Geography," reviewed in the supplement to NATURE of March 14 (p. v). The price is 2*s*. 6*d*. net. The same publishers have sent us a copy of the seventh edition, revised to date, of their "Handy-volume Atlas of the World," by Mr. E. G. Ravenstein. The price of this compact little volume is 3*s*. 6*d*.

IT is clear from the thirty-seventh annual report of the Natural Science Society at Wellington College that the society is in a flourishing condition. There is a balance in hand of 113*l*., for which, it is to be hoped, some useful scientific purpose will be found. The Saturday scientific lectures, which have become a feature of the work of the society, were continued during the Michaelmas and Lent terms. The meteorological report of the society is as complete as usual.

THE most recently published parts of the Transactions of the Royal Society of Edinburgh are vol. xli., part iii., for the session 1904–5, and vol. xlv., part i., for the session 1905–6. The papers included in these publications cover those read before the society during a period of about eighteen months. The contents are very varied, and amongst subjects of special interest in the first-named part may be mentioned the fresh-water plankton of the Scottish lochs, the structure of the series of line- and band-spectra, the hydrodynamical theory of seiches, and the plant remains in the Scottish peat mosses. In the second of the publications are, with others, papers on the varying form of the stomach in man and the anthropoid ape, the normal temperature of the monkey and its diurnal variation, and on the effect of changes in the daily routine on this variation, the elevation of the boiling points of aqueous solutions of electrolytes, and the relationship between concentration and electrolytic conductivity in concentrated aqueous solutions.

THE report for 1906 of the Agricultural Research Association for the north-eastern counties of Scotland is devoted almost entirely to an account, by Mr. T. Jamieson, of work on the utilisation of nitrogen in air by plants, in continuation of the observations described in NATURE a year ago (vol. lxxiii., p. 531). Mr. Jamieson claims that he has obtained further evidence of the absorption of nitrogen from air by plants, but the views of scientific experts upon the doctrine he desires to establish were stated in the notice of the previous volume. We have not the space available to enter into a detailed statement of Mr. Jamieson's position and point out the unsound foundation upon which it rests. We must therefore refer our readers to the volume just published for particulars of experiments which Mr. Jamieson puts forward as material for a new agricultural science. The criticisms of his views expressed at the York meeting of the British Association last year, and also in other places, are dealt with at the end of the present volume.

OUR ASTRONOMICAL COLUMN.

COMET 1907*a* (GIACOBINI).—The following elements and ephemeris have been computed for comet 1907*a* by Herr M. Ebell, from places observed on March 9, 10, and 11:—

Elements.

$T = 1907$ March $23{\cdot}5206$ Berlin.
$\omega = 319^\circ\ 34'{\cdot}3$
$\Omega = 97^\circ\ 40'{\cdot}0$ } 1907·0
$i = 141^\circ\ 20'{\cdot}5$
$\log q = 0{\cdot}31176$

Ephemeris 12h. (M.T. Berlin).

1907	α h. m.	δ ° ′	Brightness
March 19	6 40	−9 26	0·81
23	6 33	−6 22	0·74
27	6 27	−3 34	0·67

Brightness at time of discovery (mag. 11·0) = 1·0.

From the above it will be seen that the comet is travelling through the constellation Monoceros towards the northern part of Orion, and that its brightness is decreasing fairly rapidly. At present it crosses our meridian at about 6.30 p.m., and sets at about 11.30 p.m.